pressure to quit. **CONCLUSIONS:** Developing smoking cessation interventions based on punitive incentives or policies such as smoke free campuses may benefit KSA in the long run. MPOWER program may not be enough for improving smoking cessation in Saudi college students. Investing in programs that can mould the young minds at an early age to quit smoking need to be developed.

PHS7

SURVEILLANCE OF CARDIOVASCULAR RISK FACTORS AMONG PATIENTS UNDERGOING CORONARY ARTERY BYPASS SURGERY

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OBJECTIVES: To investigate the prevalence of cardiovascular risk factors among patients undergoing elective Coronary Artery Bypass Graft surgery (CABG) in Karachi, Pakistan. **METHODS:** Cardiothoracic surgery quality improvement is a core value of health care provision. In order to improve quality of care, information on key indicators needs to be systematically collected and maintained. In 2006, the cardiothoracic department at Aga Khan University developed an infrastructure that would enable us to answer the more challenging research queries in cardiac surgery practice. The resulting electronic cardiothoracic database is based on the Society of Thoracic Surgeons database. We chose the following aspects of patient care to be included in the database form: pre-surgery patient condition and medications, anesthesia information, perfusion information, surgery information, recovery information, status of the patient atdischarge, 30-days and 365-days post-surgery follow-up information .Information was collected through structured questionnaire and entered into Microsoft Access and analyzed in SPSS(Statistical package of social sciences). **RESULTS:** In this prospective study 2073 undergoing elective CABG were included. Mean age of the patients was 54.85±9.7 years, 14.7% of patients were females. Prevalence of risk factors among the study population, included: 47.10% were overweight, 14.7% were obese, 47.7% were diabetic, 69.50% were hypertensive, 50.20% were dyslipidemia, 47.7% were as smokers, 9.2% were in renal failure, addition, 53% of patients had family history of coronary artery disease, 46.7% had a history of myocardial Infarction (MI). The operative mortality rate was 0.3%. Post surgery complications included renal failure in 14.8% of patients, arrhythmias in 7%, reoperation in 2.3%, prolonged ventilation in 3.1%. **CONCLUSIONS:** There is a high prevalence of risk factors like dyslipidemia, hypertension, diabetes and smoking for ischemic heart disease in our population. Once we establish this fact we will work to control the risk factors and reduce the burden of disease so that's why this study is being done

PHS8

CHARACTERIZATION AND FACTORS ASSOCIATED WITH POST-TRANSPLANT HEADACHES: A RETROSPECTIVE SURVEY STUDY

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OBJECTIVES: Post-transplant headache (post-TX HA) is a recognized complication in transplant procedures. Its treatment can be problematic given the status of the patient and other factors. But this complication is infrequently discussed as a significant clinical problem since this symptom is generally considered less important than other complications, like organ rejections. The objective of this study is to characterize post-TX HA and to assess the factors associated with post-TX HA. **METHODS:** A survey was developed to assess these poorly investigated factors and consisted of four sections, include patients' risk factors for headaches, the characteristics of post-TX HA, patients' headache management techniques and effectiveness, the demographics of the patients. The participants of the study were patients who received kidney transplants at University Hospital in Cincinnati, OH and who currently follow-up at the Kidney Transplant Clinic of University Hospital, where the survey was administered. Other data include current medications, alcohol/tobacco/illicit drug use, and lab values were collected as well. A logistic regression model was constructed to evaluate the factors associated with the post-TX HA with the consideration of common covariates. **RESULTS:** A total of 95 patients were included in this study. 41 patients reported they had experienced at least one headache episodefollowing transplant. Compared to the counterpart, the headaches patients experienced post transplant were significantly associated with age (OR=0.947, 95% CI is 0.901 to 0.995) and presence of pre transplant headaches (OR=14.123, 95% CI is 3.810 to 52.346). In terms of comorbidities, only chronic pain (neck, back, shoulder, etc.) is a factor showing statistically significant association with post-TX HA (OR=7.269, 95% CI is 1.737 - 30.429). **CONCLUSIONS:** Patients who had headaches pre transplant and suffered chronic pain are more likely to have post-TX HA. In addition, compared to older patients, younger patients are more likely to experience headaches after transplant.

HEALTH SERVICES – Cost Studies

PHS9

BUDGET IMPACT MODEL ASSESSMENT OF THE COSTS OF CONVERTING DIALYSIS PATIENTS WITH A HIGH PILL BURDEN ON SEVELAMER TO LANTHANUM CARBONATE

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OBJECTIVES: The phosphate binders (PBs) sevelamer hydrochloride or carbonate (SH/SC) and lanthanum carbonate (LC) will be included in the Centers for Medicare and Medicaid Services (CMS) bundled payment scheme from 2016. The aim of this study was to determine the inflection point in daily drug dose at which a switch to LC becomes cost-effective in dialysis patients on SH/SC with a high pill burden. **METHODS:** A Microsoft Excel-based pharmacy budget impact model (BIM) was developed to carry out a comparative analysis of the cost impact of LC versus SH/SC therapy from the standpoint of a US-based dialysis organization. Model assumptions were based on published literature, market research data, and prescription information. User inputs included drug cost, adherence rate, number of patients on dialysis, first-line PB treatment, titration protocols, and serum phosphate target levels. **RESULTS:** The cost of an initial dose of SH/SC 4800 mg/day was lower than that of LC 1500 mg/day. After a first titration step, SH/SC 7200 mg/day vs LC 2250 mg/day was cost-neutral. Following a second titration step, SH/SC 9600 mg/day vs LC 3000 mg/day exhibited cost savings in favor of LC of $15/day vs SH and $8/day vs SC. The estimated potential cost saving of switching one patient to LC 3000 mg/day compared with up-titration to SH or SC 9600 mg/day is $451 or $228/month, respectively. This equates to an estimated saving of $13.8 million/year for the 4096 patients who were modeled to switch to LC based on utilization data. **CONCLUSIONS:** BIM analyses indicate that the inflection point at which LC becomes cost-effective is SH/SC 7200 mg/day. Substantial savings in PB costs can be realized by switching patients to LC instead of increasing the SH/SC dose above 7200 mg/day. This strategy has the potential to reduce the overall budgetary impact for US-based dialysis centers under the CMS bundle.

PHS11

ECONOMIC BURDEN OF ACUTE UROGENITAL CONDITIONS AMONG TYPE II DIABETES PATIENTS AND NON-DIABETICS IN THE UNITED STATES

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OBJECTIVES: To compare the health care costs of acute urinary tract infections (UTIs) and genital infections (GIs) between adults with type 2 diabetes mellitus (T2DM) versus those without DM (no-DM). **METHODS:** Using administrative claims data and a retrospective cohort design, commercially-insured adults with UTIs (cystitis or urethritis) or GIs (vulvovaginal candidiasis, bacterial vaginosis, or balanitis) from 2006-2010 were selected. The first UTI or GI event after a 6-month continuous enrollment period was identified, with the event date as the index date. T2DM patients, identified by ICD-9 diagnosis codes and use of non-insulin, anti-diabetic medications, were matched with a 1:3 ratio to no-DM patients on gender, age group, index year, and recurrence status (≥2 events) in the 6-month pre-index period. Health care costs related to UTI and GI events in the 30-day post-index period were compared between T2DM and no-DM cohorts. **RESULTS:** Matched UTI cohorts included 314,390 males (mean age: 59) and 944,749 females (mean age: 57). Total health care costs (mean ± standard error) related to UTIs were higher for T2DM than no-DM among males ($569±13 vs. $412±5) and females ($437±5 vs. $303±2). Inpatient and outpatient costs related to UTIs were also higher for T2DM than no-DM among males ($265±11 vs. $148±4; $221±5 vs. $189±2) and females ($163±4 vs. $88±2; $190±2 vs. $152±1), respectively. Matched GI cohorts included 23,853 males (mean age: 53) and 336,932 females (mean age: 50). Total health care costs related to GIs were higher for T2DM than no-DM among males ($457±30 vs. $332±14) and females ($181±6 vs. $133±1). The same pattern was observed for GI-related inpatient and outpatient costs. All cost differences between T2DM and no-DM were statistically significant ($p<0.05$ by Wilcoxon rank-sum test). **CONCLUSIONS:** Relative to non-diabetics with urogenital conditions, the costs of T2DM patients with urogenital conditions were significantly higher.

PHS12

ASSESSING THE IMPORTANCE OF FIBROSIS STAGE ON THE COST-EFFECTIVENESS OF BIRTH-COHORT VERSUS RISK-BASED SCREENING AND TREATMENT FOR HEPATITIS C VIRUS INFECTION

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OBJECTIVES: Recent studies have demonstrated that birth-cohort (BC) versus risk-based (RB) screening for hepatitis C virus (HCV) infection in the U.S is cost-effective. The cost and logistical implications of widespread screening and treatment are important considerations from a policy perspective; therefore, the aim of this study was to evaluate where the greatest potential for cost savings and quality adjusted life years (QALYs) gained exists, when comparing BC versus RB screening policies. **METHODS:** A published Markov model describing the natural history of HCV was adapted to a U.S setting. The BC target population was subjects born from 1945-65. Eligible patients identified were treated with a direct acting anti-viral (DAA) in combination with pegylated interferon plus ribavirin, achieving SVR rates of 0.78/0.76 for genotype 1 (Gt1) and 2/3 (Gt2-3) respectively for fibrosis stages F0-F2; 0.62/0.67 (Gt1/Gt2-3) for F3 and 0.62/0.57 (Gt1/Gt2-3) in F4. Published U.S. 2011 costs were used and both costs and benefits were discounted at 3.0%. **RESULTS:** From a tested population of 66.2 million, 1,070,840 were identified and 551,800 were allocated treatment over a ten year period. The cost-effectiveness (CE) of BC compared to RB screening and treatment was $32,945; with treatment prioritized towards F3/F4 the CE decreases to $23,269 and with treatment prioritized towards F0/F1 increases to $44,721. Furthermore, prioritizing treatment in more advanced patients had the potential to reduce costs by $3,169,477,535, increase QALYs by 159,098 and avoid an additional 31,636 HCV related complications compared to prioritizing treatment in less advanced patients. **CONCLUSIONS:** This study confirms that BC screening and treatment is cost-effective across all fibrosis stages and demonstrates that a strategy prioritizing treatment in F3/F4 would minimize the